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ON A COLLECTION OF ORTHOPTERA  
FROM THE SOLOMON ISLANDS,  
CHIEFLY FROM THE INSTITUT ROYAL  
DES SCIENCES NATURELLES DE BELGIQUE,

by Cornelis WILLEMSE (Eygelshoven).

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Through the kindness of the curator of entomology of the Institut royal des Sciences naturelles de Belgique, Mr. A. COL-LART, I had the opportunity to study a small collection of *Orthoptera* from the Solomon Islands containing new species which will be described below, adding a few new ones from my own collection and the Naturhistorisches Museum von Basel, kindly given me for study by Dr. E. HANDSCHIN.

Superfamily *ACRIDOIDEA*.

Fam. *ACRIDIDÆ*.

Subfam. *ÆDIPODINÆ*.

*Aiolopus tamulus* FABRICIUS.

1798. *Gryllus tamulus* FABRICIUS, Entom. Syst. Suppl., p. 195.

Locality. — Buin (Isl. Bougainville), 1 ♂, 1 ♀.

*Heteropternis obscurella* BLANCHARD.

1853. *Ædipoda obscurella*, *Ædipoda obscura* (nec FABRICIUS)

BLANCHARD, Voyage Pôle Sud Dumont d'Urville, Zool.

Ins., IV, p. 375, Pl. 3, fig. 10.

Locality. — Buin (Isl. Bougainville), 1 ♂, 1 ♀.

## Fam. PYRGOMORPHIDÆ.

## Subfam. PYRGOMORPHINÆ.

*Atractomorpha* sp.

Locality. — Buin (Isl. Bougainville), 2 ♂♂.

## Fam. CATANTOPIDÆ.

*Oxya chinensis* THUNBERG.

1815. *Gryllus chinensis* THUNBERG, Mém. Acad. Petersb., V, p. 253.

Locality. — Buin (Isl. Bougainville), 3 ♂♂, 3 ♀♀.

*Catantops splendens* THUNBERG.

1815. *Gryllus splendens* THUNBERG, Mém. Acad. Petersb., V, p. 236.

Locality. — Buin (Isl. Bougainville), 2 ♂♂.

*Catantops angustifrons* WALKER.

1870. *Acridium angustifrons* WALKER, Cat. Derm. Salt. B. M., III, p. 593, n° 57.

Locality. — Buin (Isl. Bougainville), 1 ♀.

*Valanga coerulescens* nov. spec.

♀. — Size large. Frontal ridge in profile straight, slightly reclinate, forming a rounded angle with the fastigium, parallel sided, not widened towards the clypeus, only impressed below the median sulcus. Fastigium of vertex short, strongly sloping, before the eyes widened, anterior margin rounded and shallowly punctate. Interocular distance about as broad as the frontal ridge. Pronotum cylindrical, metazona slightly widened posteriorly, prozona with a coarse sculpturation, metazona more finely punctate; median keel in profile nearly straight, interrupted by the three transverse sulci; anterior margin slightly incised in the middle, posterior margin rectangularly rounded; lateral lobe higher as broad, lower margin ascending from the middle anteriorly, anterior and posterior angle rounded.

Elytra in the basal half with a dense reticulation, apical half more transparent; apex rounded. Prosternal spine straight,

not bent posteriorly, laterally compressed with the anterior margin rounded, the posterior one straight; apex obtusely pointed. Hind femur thick, short, not attenuate. Hind tibia with a row of 11 spines on the inner and 10 on the outer margin, without outer apical spine.

♀. — Supra analplate triangular, elongate, apex rounded, disc with a median sulcus. Cercus short, straight, conical, apex subacute. Valves of ovipositor of the usual type, margins obtuse. Subgenital plate longer than broad, posterior margin with a triangular projection in the middle, disc with a median, longitudinal impression.

General coloration greenish yellow or yellowish brown. Antennæ blackish brown. Occiput brownish with a faint yellow spot on each side. Pronotum yellowish brown to greenish brown, along the sides with a dark narrow stripe, which is most distinct in the prozona. Elytra greenish brown, unicolorous, without dark spots or stripes. Wings bluish, along the hind margin slightly infumated. Anterior and median legs yellowish brown, tibiæ and tarsi from above dark green. Hind femur yellowish without any dark stripe or point, uniformly coloured; arcus genicularis blackish brown, genicular lobes light yellowish green. Hind tibia dark bluish green, spines yellowish brown with black tips. Hind tarsi dark brown. ♂ unknown.

	♀
Length of body ... ..	51 mm.
» pronotum ... ..	12,5 »
» elytron ... ..	52,5 »
» hind femur ... ..	30 »

Locality. — Solomon Isl. (Buin, Bougainville Isl.). Type Inst. roy. Sci. nat. Belgique.

This species is at once differentiated by the bluish colour of the wing.

Superfamily *TETTIGONIOIDEA*.

Fam. *PHANEROPTERIDÆ*.

Subfam. *PHANEROPTERINÆ*.

*Psyra solomonensis* nov. spec.

(Figs. 1, 2.)

♀. — Body and legs yellowish or yellowish brown, probably green when alive. Head yellowish brown, without dark spots. Joints of antenna in the basal half dark brown from



above, with distinct pale rings, the apical half missing in the specimen before me.

Pronotum yellowish brown, disc rounded posteriorly, hind margin yellowish, bordered with black only at the sides, not in the middle, disc in the posterior third blackish brown, which dark band anteriorly is straightly bordered between the shoulders; lateral lobe about as long as high.

Elytra green, vena mediastina yellowish, with a small black spot at the insertion, but not bordered by a violet band; there are some dispersed brown spots on the elytra; area analis small, with a brown spot near its apex; hind margin of elytra dark brownish in the basal half. Vena radialis posterior with 3 branches, all running into the hind margin, the first one arising a little before the middle and bifurcated in its basal third. All the legs are relatively long and slender. Anterior coxæ armed with a sharply pointed spine. Anterior femur from below with an irregular row of 5 - 6 spines on the inner lower margin. Median femur with a row of 5 - 6 regularly arranged spines on the outer lower margin. Hind femur long and elongate, in the apical half from below with a row of 9 - 10 spines on both sides.

Legs yellowish brown, anterior femur with a black spot on the inner kneelobe, anterior tibia with a black spot at the inner an a small one at the outer side near the base and at the apex. Median femur with some small black spots at the apex; median tibia from above at the base with a row of small black spots, apposed at the base of the small spines. Hind femur yellowish (green), spines black at the base and at the apex. Top of hind femur without black spots. Hind tibia with rows of spines, most of which are black at the base and at the apex.

Anal segment and cerci lacking in the specimen before me. Ovipositor relatively short, strongly compressed, slightly curved, somewhat sickle-shaped, shorter than twice the length of pronotum, apex acute; its surface smooth, upper and lower margin finely serrate in the apical third.

Subgenital plate slightly damaged, posterior margin rounded?

Male unknown.

	♀
Length of body ... ..	35 mm.
"    pronotum ... ..	8   "
"    elytron... ..	54   "
Width of elytron ... ..	14,5   "
Length of anterior femur ... ..	10   "
"    "    tibia ... ..	12   "
"    median femur ... ..	16   "

»	»	tibia	...	...	...	16	»
»	»	posterior femur	...	...	...	32	»
»	»	tibia	...	...	...	36	»
»	»	ovipositor	...	...	...	12	»

Locality. — Solomon Islands (Guadalcanal Isl., Aola, X-1928). Type is unique, coll. Mus. Basel.

*Psyra ponceleti* nov. spec. (1).

(Figs. 3-5.)

♀. — Body and legs yellowish brown, probably green when alive. Head yellowish brown, marmorated on both sides with dark longitudinal stripes on the frons and on the cheeks. Antennal scrobæ dark brown. First antennal joint dark brownish, the other joints more reddish or yellowish brown, somewhat annulated by yellow joints. Pronotum brown or yellowish green, lateral lobe with a pale spot in the middle near the lower margin and with small, dark brown points irregularly arranged or dark irregular stripes; disc of pronotum brown or reddish brown with a few, irregularly arranged, small lighter or darker stripes or spots, posterior part of the disc with the hind margin bordered with yellow and anteriorly with a broad velvety black or dark brown band between the shoulders. This black band is in the middle of its anterior margin, sometimes interrupted in the median line. Lateral lobe of pronotum distinctly higher as long.

Elytra green, vena mediastina with a small black spot at the insertion, yellowish brown, with a narrow violet band along the vein; elytra with some dispersed, small brown spots. Vena radialis reddish brown; vena radialis posterior with 3 branches running into the hind margin, the first one arising a little before the middle and bifurcated in its basal third. Legs relatively long. Anterior coxæ armed with a sharply pointed spine. Anterior femur from below with a row of 8 spines on the inner lower margin. Median femur with a row of 7 spines on the outer lower margin. Hind femur long, elongate, in the apical half from below with a row of 9-11 spines on both sides. Anterior and median legs yellowish brown, anterior coxæ with some black points. Hind femur yellowish brown, spines with dark tips. Hind tibia with rows of spines which are black at the base and at the apex.

(1) In honor of the Rév. Père PONCELET who collected several interesting *Orthoptera* on Bougainville Island.



Anal segment lacking in the specimen before me. Cerci crossing each other, cercus conical, broad at the base, curved, apical third very thin and pointed. Ovipositor strongly compressed, sickle shaped, more than twice the length of the pronotum, apex acute, its surface smooth, upper and lower margin finely serrate in the apical half. Subgenital plate with the posterior margin rounded.

	♀
Length of body ... ..	34 mm.
"    pronotum ... ..	7 "
"    elytron ... ..	about 55 "
Width of elytron ... ..	12,5 "
Length of anterior femur ... ..	11 "
"    "    tibia ... ..	13 "
"    median femur ... ..	15 "
"    "    tibia ... ..	17 "
"    posterior femur ... ..	34 "
"    "    tibia ... ..	40 "
"    ovipositor ... ..	19 "

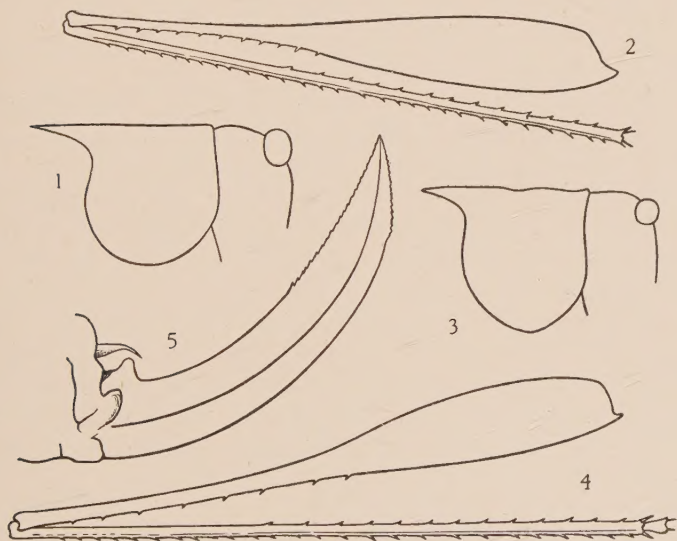
Locality. — Solomon Islands (Bougainville Isl., Buin).  
The type is unique. Coll. mea.

The above described two *Psyra* species belong both to the *melanonota* group, having the pronotum not unicolorous but with dark brown bands or spots near the posterior margin. They may be distinguished as follows :

1. Vena mediastina of elytra yellow or yellowish brown, always bordered anteriorly by a purplish red band or narrow stripe.
2. Ovipositor only slightly curved ... .. *melanonota* STÅL.
2. 2. Ovipositor distinctly sickle-shaped ... .. *ponceleti* nov. sp.
1. 1: Vena mediastina not bordered by a purplish red band.
2. Anterior tibia rounded ... .. *ceylonica* Br. v. W.
2. 2. Anterior tibia sulcate from above.
3. Posterior margin of disc of pronotum bordered by a narrow, velvety black stripe, the remaining part unicolorous. Ovipositor shorter than twice the length of pronotum ... .. *brunneri* KARNY.
3. 3. Posterior part of disc of pronotum not so coloured, in most cases with a dark transverse band between the shoulders and (or) the whole disc brownish dark. Ovipositor more or less than twice the length of the pronotum.

4. Subgenital plate of female elongate and acuminate. Ovipositor longer than the length of pronotum... .. *borneensis* Br. v. W.
4. 4. Subgenital plate of female simply rounded.
5. Hind femur long and strongly attenuate. Lateral lobe of pronotum as long as broad. Ovipositor short, only slightly bent upwards, shorter than twice the length of pronotum ... .. *solomonensis* nov. spec.
5. 5. Ovipositor more than twice the length of pronotum, distinctly sickle-shaped. Legs shorter, hind femur shorter and less attenuate ... .. *celebica* KARNY.

From three of the seven species, mentioned in the key, only the female is known. When the males can be studied, I think that a better key can be given, we have to wait for the material.



Figs. 1-5. — *Psyra* ssp.

1. — *Psyra solomonensis* n. sp., ♀, Pronotum in profile ( $\times 3$ ).  
 2. — *Id.*, Hind femur ( $\times 2$ ). 3. — *Psyra poncetletti* n. sp. ♀ ( $\times 3$ ).  
 Pronotum in profile. 4. — *Id.*, Hind femur ( $\times 2.5$ ). 5. — *Id.*,  
 Ovipositor ( $\times 3$ ).

*Euanerota spinifera* nov. spec.

(Fig. 8.)

♂, ♀. — General coloration yellowish green, in live probably green. Antennæ (partly broken) of the same colour. Head and

pronotum yellow, in the female the pronotum with small faintly coloured, reddish, round, small spots; near the posterior margin on the disc with a blackish brown spot.

Elytra much shorter than the wings, gradually narrowing apically, apex rounded. Elytra yellowish or yellowish brown, about all the small cells between the veins velvety blackish brown, more so in the female than in the male; area analis in the male and female with a distinct black spot at the base. Wings hyalinous, except the expanded part when the wing is closed, which is of the same colour as the elytron, with blackish dots in the cells, except along the anterior margin.

Legs of the same colour as the body, with dispersed reddish brown points. Spine of anterior coxa practically absent.

♂. — Analtergit not produced, broader than long, lateral margin slightly convex, posterior margin substraight, bearing in its middle a distinct, toothlike processus, which, seen in profile is concavely bent downwards, probably due to shrivelling by drying, the top of it obtuse.

Cercus cylindrical, slightly curved and somewhat distorted, at its apex broadened, forming a spoonlike, concave lamella, which on one side at its base, is incised, showing there a kind of small blunt tooth. This part of the cercus is black. Subgenital plate elongate, lamellate, produced, curved upwards, its margins slightly narrowing apically, apex mutilated in the specimen before me.

♀. — Supra analplate triangular, apex obtuse. Cercus conical, slightly bent, apex obtusely pointed. Ovipositor short, broad, strongly curved upwards, upper margin crenulate, lower margin only crenulate in the apical half; plica basalis swollen, long oval, the apex rounded. Subgenital plate small, narrow, apex subobtuse.

	♂	♀
Length of body ... ..	12 mm.	9,5 mm. (shriveled)
"    pronotum ... ..	2,5 "	2,5 mm.
Width of pronotal disc ... ..	1,5 "	2 "
Length of lateral lobe of pronotum	2,5 "	2,5 "
Width               "               "	2 "	2 "
Length of elytron ... ..	14 "	15,5 "
Width               "               "	2 "	2,5 "
Length of wing ... ..	21 "	23 "
"    anterior femur ... ..	4 "	5 "
"    median femur... ..	6 "	6 "
"    posterior femur ... ..	15,5 "	17 "
"    ovipositor ... ..		3 "



Locality. — Buin (Isl. of Bougainville) Solomon Isl. 1 ♂ (type), 1 ♀ (allotype). Type and allotype in the Inst. roy. Sci. nat. Belgique.

This species differs from all the known species by the curious cercus of the male. The following key may be used to distinguish the males of the known species.

1. Subgenital plate laterally compressed, somewhat tube like. Anal tergite with the posterior margin concave.
2. Subgenital plate truncate at the apex, with a narrow median incision. Anal tergite in the middle of the posterior margin with a tooth like prolongation. Celebes. *celebica* DE HAAN.
2. 2. Subgenital plate at the apex widened, in the middle with a deep incision forming two lobes. Anal tergite without tooth in the middle but rotundate at the posterior margin. The whole of the Indo Malayan region ... *brevis* SERVILLE.
1. 1. Subgenital plate lamellate, dorso-ventrally compressed.
2. Cercus with a large tooth in the middle, at the apex split up into two sharp black teeth, a smaller and a larger one. Flores.... *dentata* WILLEMSE.
2. 2. Cercus without tooth in the middle.
3. Cercus at its apex broadened, forming a spoonlike lamella, with a small blunt tooth at the base of this dilatation. Anal tergite with a toothlike prolongation in the middle of its posterior margin. Solomon Isl. ... *spinifera* nov. spec.
3. 3. Cercus not dilated, but pointed at its apex. Anal tergite without tooth-like prolongation.
4. Supra analplate at the posterior margin deeply excised.
5. Supra analplate very deeply excised, nearly divided into two lobes. Philippines ... *furcifera* STÅL.
5. 5. Supra analplate less deeply incised. Philippines ... *neglecta* KARNY.
4. 4. Supra analplate at the posterior margin not excised, but rounded truncate. W. Bali ... *curvata* WILLEMSE.

Besides the above mentioned species *E. longicauda* WILLEMSE has been described from the IIs. of Flores. The male of this species is still unknown.

Fam. *PHYLLOPHORIDÆ*.*Phyllophorella brevicerca* KARNY.

1924. *Phyllophorella brevicerca* KARNY, Treubia, V, Suppl., p. 26, 122, fig. 37.

Till now only the male was known. I have before me two males and two females collected in Buin (Isl. Bougainville), which is the type locality, from the Inst. roy. Sci. nat. de Belgique.

The male agrees in every respect with the description of *brevicerca* by KARNY. The description of the female is as follows: Anterior margin of vertex somewhat convex, not or scarcely incised in the middle. Anterior margin of pronotum slightly convex (in the male nearly straight); prozona with 4, mesozona with 3 small obtuse spines. Posterior margin of lateral lobe of pronotum distinctly lobate, as in the male (in the figure of KARNY [fig. 37] not distinctly indicated).

Anterior femur with 5-6 inner and 7 outer spines from below, median femur respectively 7 inner and 8 outer spines, hind femur with 8 inner and 9 outer spines. Kneelobes of all femora with black tips.

Elytron relatively broader, venal pattern as in the male. Hind femur relatively more slender than in the male.

♀. — Supra analplate triangular, apex subpointed; with a narrow median sulcus. Cercus overreaching only slightly the supra analplate, slightly curved inwards, conical, apex subacute. Ovipositor long, substraight, at the base slightly inflated, margins smooth, apex obtusely pointed. Subgenital plate about as long as broad, lateral margins convexly narrowing posteriorly, at the apex with a small incision in the middle.

General coloration green, face in one of the specimen with a small round yellow spot in the middle below the antennæ, probably present in well preserved specimen.

	♀	
Length of body (without ovipositor) ... ..	38	- 42 mm
"    pronotum ... ..	28	- 29 "
"    "    before the lateral angle	10	- 12 "
"    "    behind the lateral angle	17	- 18 "
Breadth of pronotum anteriorly ... ..	6,5	- 7 "
"    "    at lateral angle ...	11	- 12,5 "
Length of elytron ... ..	74	- "
Breadth of elytron ... ..	26	- "

Length of wing ... ..	70	-	»
» anterior femur ... ..	12	-	»
» anterior tibia ... ..	13,5	-	»
» median femur ... ..	14,5	-	»
» median tibia ... ..	15	-	»
» posterior femur ... ..	33,5	- 34	»
» posterior tibia ... ..	32,5	-	»
» ovipositor ... ..	28	-	»

### *Phyllophorella dorsalis* nov. spec.

(Fig. 9.)

♀. — General characters of *Phyllophorella*. The colour of the holotype is yellowish brown, discoloured by preservation in some liquid. Very probably the colour is green *in vivo*.

Anterior tibiae with slit shaped tympani on both sides, with very distinct conchi. Disc of pronotum elongate-lozenge shaped; anterior margin on both sides notched, in the middle slightly convex. Lateral keels along their whole length with very low, small, blunt teeth or crenulate; in pro- and mesozona, each with 2 - 3 blunt small teeth, in the metazona crenulate-dentate till about the apex of pronotum. At the lateral angles only with a somewhat larger notch, but not distinctly spined. Lateral keel before the lateral angle slightly convex, behind it straight or substraight. The length of the part of metazona behind the lateral angles about one and a half times as long as the width between the lateral angles. Surface of the disc of pronotum finely punctulated with a distinct, complete, low, transverse sulcus between pro- and mesozona; a low incomplete transverse sulcus between the meso- and metazona, which sulcus in the middle is indicated by a somewhat deeper groove; in the mesozona itself there is on both sides, between the punctulation, a round more smooth whitish spot; metazona, especially in the apical part with irregular, transverse, incomplete grooves on both sides of the distinct, but low, median keel which is perceptible in the metazona, but which does not quite reach the apex of pronotum. Apex of pronotum rounded without teeth or crenulations, subsmooth. Lateral lobe of pronotum with the anterior margin subconcave, partly crenulated; anterior angle rounded with a row of small blunt spines, which continue on the anterior part of the lower margin. Posterior angle of lower margin angularly rounded.



Posterior margin of lateral lobe distinctly lobate; from the lateral angle to the apex distinctly expanded laterally, so that this part is visible from above, its lower margin obtusely curved a little behind the lateral angle. Viewed in profile the pronotum has the anterior part slightly bent downwards, the posterior one is horizontal.

Elytra and wings reaching far behind the hind femur and ovipositor. Elytron broadest behind the middle, from there narrowing towards the obtusely pointed apex. Anterior margin in the apical third strongly bent towards the apex, posterior margin slightly convex.

The venal pattern is as follows :

Vena mediastina short, bifurcated behind its middle, both branches terminating into the costal margin. Vena radialis anterior straight, with about 10 parallel branches in the marginal field, all branches terminating into the costal margin. The vena radialis posterior runs close to the vena radialis ant. till about its apex, where it is bifurcated, the first branch of it not, the second one terminating into the apex. First radial branch arising behind the middle. Besides these branches there are about 10-11 branches arising at regular intervals, all connected with the vena media. Vena media terminating at a short distance before the apex into the posterior margin. Colour of the elytra is of the same colour as the rest of the body, apical cellules with some dispersed, brown, small, round spots. Posterior margin of elytra with a row of dark brown spots or stripes. Wings transparent, about as long as the elytra. They are of the normal shape in the genus, broadest in the basal half.

Prosternum with a low, blunt tubercle on each side touching each other in the middle. Meso- and metasternal lobes terminating into a short blunt spine.

Legs relatively long, slender. All femora from above without spines, kneelobes bearing a black spine on each side. Anterior femur with a row of 5-6 spines on the inner margin and 5 spines on the outer margin, median femur respectively 4-6 on the inner and 6-7 on the outer margin, posterior femur respectively 7-8 on the inner and 10-15 on the outer margin. Anterior tibia with a row of 5-6 spines on the inner and 5 spines on the outer margin, median tibia respectively with 7 on the inner and 8 on the outer margin. Posterior tibia dorsally

with 13 inner and 16 outer spines, ventrally with 7-8 inner and 10-12 outer spines. Hind tibia with a row of short, numerous bristles on the apical third of the inner margin. Hind femur slender, somewhat broader and stronger in the basal third. Hind tibia about as long as the hind femur.

♀. — Penultimate tergite with the posterior margin concavely bent. Supra-analplate triangular, somewhat longer as broad, apex subacute. Cercus conical, slightly curved, apex acute, reaching a little beyond the supra-analplate. Ovipositor nearly straight, only slightly curved, near the base slightly inflated, margins smooth, apex pointed. Subgenital plate somewhat longer than broad, sides gradually narrowing towards the apex, apex with a triangular, median incision, posterior margin on both sides sublobiform.



Figs. 6-7. — *Pseudorhynchus robustus* n. sp., ♀ type.

6. — Head and pronotum in profile ( $\times 4$ ). 7. — Hind femur ( $\times 4$ ).

Length of body (without ovipositor)...	23,5 mm
"    pronotum ...	23,5 "
"    "    before the lateral angle...	10 "
"    "    behind " "	13,5 "
Breadth of pronotum anteriorly ...	6,5 "
"    "    at the lateral angle...	10 "
Length of elytron ...	64 "
Breadth of " ...	23 "
Length of wing ...	61 "
"    anterior femur...	11 "
"    "    tibia ...	12 "

»	median femur ... ..	13	»
»	» tibia ... ..	14,5	»
»	posterior femur ... ..	31	»
»	» tibia... ..	30	»
»	» ovipositor ... ..	27	»

Locality. — Buin, Ile Bougainville (Solomon Isl.). Type is unique, coll. Inst. roy. Sci. nat. Belgique.

This species is at once distinguished from all the other known species by the expansion of the lateral lobe in its posterior part, which expansion is visible from above.

Fam. *MECOPODIDÆ*.

*Mecopoda elongata* LINNÉ var. *rufa* WALKER.

1758. *Gryllus Tettigonia elongatus* LINNAEUS, Syst. Nat., Ed. X, I, p. 429.

1870. *Mecopoda rufa* (nec STOLL) WALKER, Cat. Derm. Salt. B. M., III, p. 458.

Locality. — Buin (Isl. Bougainville), 1 ♂.

*Mossula salomonis* KIRBY, 1891.

1891. *Mossula salomonis* KIRBY, Trans. Ent. Soc. Lond., p. 411.

Locality. — Buin (Isl. Bougainville), 2 ♂♂, 2 ♀♀.

*Paramossula basalis* CAUDELL.

1916. *Mossula basalis* CAUDELL, Gen. Ins., Orth., fasc. 171, p. 11, Pl. 3, fig. 1 (not Pl. 2, fig. 10), footnote.

Locality. — Buin (Isl. Bougainville), 1 ♀.

*Phrictætypus flavo-ornatus* nov. spec.

♂. — General appearance like *P. nigro-ornatus* WILLEMSE, differing in the following features.

Body more robust. Lateral lobe of pronotum with two, irregular impressed grooves, posterior margin broadly rounded. Elytra long and broad, mediastinal vein absent. Anterior femora with a row of 5 spines from below on the inner margin. Median



femora with a row of 5 spines from below on the outer margin. Lobes of meso- and metasternum with a sharp spine.

♂. — Ultimate tergite with the posterior margin deeply concave in the middle, disc without median impression. Subgenital plate longer than broad, slightly narrowing apically, posterior margin with a median triangular incision; styli thick, short, shorter than the depth of the triangular incision of the posterior margin.

General coloration green or yellowish brown. Antenna reddish brown, first joint not bordered with black at the insertion of the second joint, remaining joints somewhat annulated with reddish or reddish brown.

Head yellowish brown or greenish yellow, unicolorous. Vertex with two yellow oval, smooth spots at the inner side of the antennal scrobæ. Pronotum yellowish brown or greenish, unicolorous, without dark stripes or figures. Epimerum of pro-, meso- and metasternum unicolorous yellowish brown.

Elytron green, subcosta and radial vein yellowish, posterior part of elytron with a row of 6-8 blackish round spots and a row of 3-4 smaller ones along the posterior margin. Wings hyalinous, veins pale greenish.

Anterior and median legs yellowish or greenish, spines of the same colour, insertion of the spines not black. Hind femora are missing in the specimen before me. ♀ unknown.

	♂
Length of body ... ..	33 mm
» head ... ..	3 »
» pronotum... ..	7,5 »
» elytron ... ..	45 »
Width of elytron... ..	11 »
Length of anterior femur... ..	14,5 »
» median femur ... ..	13 »
Hind femur missing.	

Locality. — 1 ♂, Buin (Isl. Bougainville), Solomon Isl. Type Inst. roy. Sci. nat. Belgique. The type is unique.

This species is differentiated from the two other known species by the yellow round spots on the vertex, and longer elytra. They may be distinguished by the following key.

1. Body uniformly green, without blackish or yellow spots or figures. Elytron ♂ 22-27 mm. Styli of subgenital plate in the male large (New Guinea) ... .. *viridis* BOLIVAR.

1. 1. Body green or yellowish brown, with distinct blackish or yellow spots or figures. Elytron ♂ 35 - 45 mm. Styli of subgenital plate in the male small.
2. Disc of pronotum unicolorous yellowish brown or green. Vertex with two rounded oval yellow spots. Elytron ♂ 45 mm (Solomon Isl.) ... .. *flavo-ornatus* nov. spec.
2. 2. Disc of pronotum brown with a narrow black V shaped figure in the middle and a black narrow stripe in the first transverse sulcus on both sides. Vertex without yellow spots. Elytron ♂ 35 mm (Solomon Isl.) *nigro-ornatus* WILLEMSE.

Fam. *CONOCEPHALIDÆ*.

Subfam. *COPIPHORINÆ*.

### *Euconocephalus australis* BOLIVAR.

1884. *Conocephalus australis* BOLIVAR, I, Viaje al Pacif. Ins., p. 90.

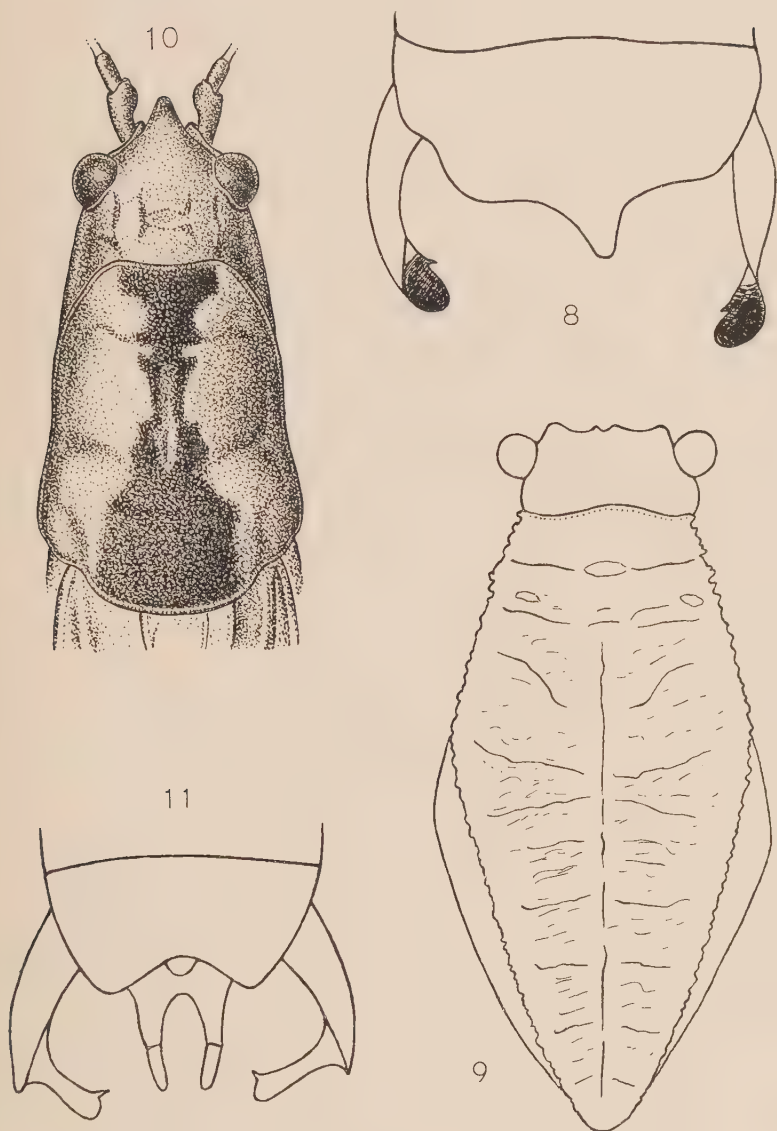
Locality. — Buin (Isl. Bougainville), 2 ♂♂, 1 ♀.

### *Pseudorhynchus robustus* nov. spec.

(Figs. 6-7.)

♀. — Body stout. Fastigium of vertex triangular, reaching beyond the antennal scrobæ, not quite twice the length of the eye as seen from above; its apex subacute, in profile horizontal. Lower margin of fastigium seen in profile with a strong tooth near the apex, followed posteriorly by a rounded incision. Pronotum with the anterior margin slightly concave, posterior margin straight, prozona with a transverse sulcus. Lateral lobes roundly inserted, about as long as high, lower margin nearly horizontal, anteriorly passing, with a rounded bow into the anterior margin, posterior angle broadly rounded, humeral sinus distinct.

Elytra reaching the top of hind tibia, overreaching a little the ovipositor, anterior and posterior margin nearly parallel, apex truncately rounded. Anterior femur smooth from above, inner lower margin with 3 - 4 distinct teeth, outer lower margin with 2 - 3 teeth. Median femur from below with a row of 6 outer



Figs. 8-11. — *Euanerota spinifera* n. sp.

*Phyllophorella dorsalis* n. sp. and *Nicsara solomona* n. sp.

8. — *Euanerota spinifera* n. sp., ♂ type, Top of abdomen from above ( $\times 30$ ). 9. — *Phyllophorella dorsalis* n. sp. ♀, Head and pronotum from above ( $\times 4$ ). 10. — *Nicsara solomona* n. sp., ♂ type, Head and pronotum from above ( $\times 4$ ). 11. — *Id.*, Top of abdomen ( $\times 4$ ).



spines, inner margin smooth. Hind femur with 10 - 11 outer spines from below, inner margin smooth.

♀. — Penultimate tergite with the lateral margins narrowing apically, at the apex with a small incision and a deep median sulcus on the apical part of the tergite. Supra analplate small, triangular, partly hidden. Cereus cylindrical, tapering towards the apex and there slightly bent inwards, apex subacute. Ovipositor substraight, lamellæ in the apical half somewhat broadened, apex subacute. Subgenital plate short, narrowed, apically, apex triangularly excised.

General coloration green or yellowish green. Antennæ yellowish, unicolorous. Head green, frons yellowish green, clypeal margin blackish brown, mandibles black, except the insertion which is yellowish. Pronotum greenish with a reddish brown stripe along the obtuse lateral keels. Elytra green, without dark spots, wings hyalinous. Legs yellowish green. Hind femur unicolorous yellowish green. Ovipositor green. ♂ unknown.

Length of body... ..	44 mm
» pronotum... ..	10 »
» elytron... ..	50 »
» wing ... ..	49 »
» anterior femur ... ..	9 »
» median femur ... ..	9,5 »
» posterior femur ... ..	20 »
» ovipositor... ..	21 »

Locality. — 1 ♀, Buin (Isle of Bougainville) Solomon Isl. Type Inst. roy. Sci. nat. Belgique. The type is unique.

In the key of KARNY (1907, p. 17) it runs near *P. minor* REDTENBACHER from which it differs in the more stout body, the somewhat shorter lateral lobe of pronotum, the relatively longer hind femur and longer ovipositor.

Subfam. *LISTROSCELINÆ*.

### Hexacentrus sp.

Locality. — Buin (Isl. Bougainville), 1 ♀. Without male this species is not to identify.

Subfam. *AGRÆCINÆ*.*Nicsara solomona* nov. spec.

(Figs. 10-11.)

♂. — Size medium. Head smooth, shining, with minute sub-obsolete impressions. Fastigium of vertex short, conical, apex obtusely pointed, reaching the middle of the first antennal joint. Occiput with a H-shaped impression in the middle; behind the eye on both sides with a low, irregular, longitudinal sulcus, which near the anterior margin of pronotum is bifurcated, the branches forming a semicircular figure.

Pronotum smooth, shining, on the disc with a fine shagreen-like sculpturation near the anterior margin and in the metazona; sulci low on the disc, more strongly defined on the lateral lobes; anterior margin slightly concave, metazona somewhat enlarged posteriorly, hind margin rounded. Lateral lobe distinctly longer than high, posterior margin with a faint indication of a humeral sinus.

Elytra and wings fully developed, reaching a little behind the hind knee. Elytron narrowing from the middle towards the rounded apex, subcosta, radius and media nearly parallel, radius and media terminating into the apex; there is no radial sector. Wing cycloid. Mesosternal and metasternal lobe terminating into a distinct blunt tooth. Anterior femur with a row of 6-7 small spines from below on both sides, internal genicular lobe with a small tooth. Auditory foramina rimate. Median femur with a row of 6 spines on the outer and 2-3 spines on the inner margin at the base from below; smooth from above, outer kneelobe obtuse, inner kneelobe with a short spine. Hind femur thick at the base, relatively short, from below in the apical half of the outer margin with 8-9 spines, inner lower margin and from above smooth; kneelobes on both sides with a spine.

♂. — Ultimate tergite much broader than long, lateral margins narrowing posteriorly, posterior margin deeply, roundly incised, making the impression of terminating into two lobes. Supraanal plate very small, triangular, with a median impression. Cercus large, broad, slightly curved inwards, laterally com-

pressed and furrowed on the inner side, at the base with a blunt, curved tooth, near the apex suddenly rectangularly bent inwards, the upper margin terminating into a small tooth at this place, the top of the rectangularly bent part knoblike with a minute sharp tooth. Subgenital plate somewhat longer than broad, with a blunt longitudinal keel on both sides and a finer one in the middle, both incomplete; lateral margins from the middle narrowing posteriorly and slightly concave; the posterior margin deeply, roundly incised. Styli on each side of the posterior margin relatively large, straight.

General coloration brown or yellowish brown. The whole head unicolorous yellowish brown, only the margins of fastigium of vertex bordered with dark brown. Antennæ yellowish brown, with intersections of a few joints darkened. Pronotum of the general coloration, disc with a distinct hour glass shaped blackish brown figure in the middle, reaching from the anterior to the posterior margin; in the middle less darker coloured, the margins of the figure undulated.

Elytra yellowish brown, with some dispersed dark spots. Wings hyalinous, principal veins yellowish brown. Anterior leg yellowish brown, tibia from above at the auditory foramina with a black spot. Median legs yellowish brown, with the articulation of the tibia black. Hind femur yellowish brown, with a dark brown, narrow prægenicular ring. Hind tibia yellowish brown, spines dark brown. ♀ unknown.

	♂
Length of body... ..	31 mm
"    pronotum... ..	9,5 "
"    elytron... ..	27,5 "
Width of      " ... ..	6,5 "
Length of anterior femur ... ..	9,5 "
"    median femur ... ..	9,5 "
"    posterior femur... ..	19 "

Locality. — 1 ♂, Isle of Bougainville, Buin (Solomon Isl.), The type is unique. Type Inst. roy. Sci. nat. Belgique.

This species belongs to the group with the unicolorous frons, but may be distinguished from all the other species of this group, by the hourglass shaped figure on the disc of pronotum.



Superfamily *GRYLLACRIDOIDEA*.Fam. *GRYLLACRIDIDÆ*.*Solomogryllacris* nov. gen.

This genus is allied to *Niphetogryllacris*, differing in the short elytra with the vena media and vena cubitus both being simple and not furcated.

Body of the usual form, size medium. Frons and vertex smooth, with a few rounded points, shining; frons gradually passing into the cheeks, without separating keels. Pronotum of the usual type.

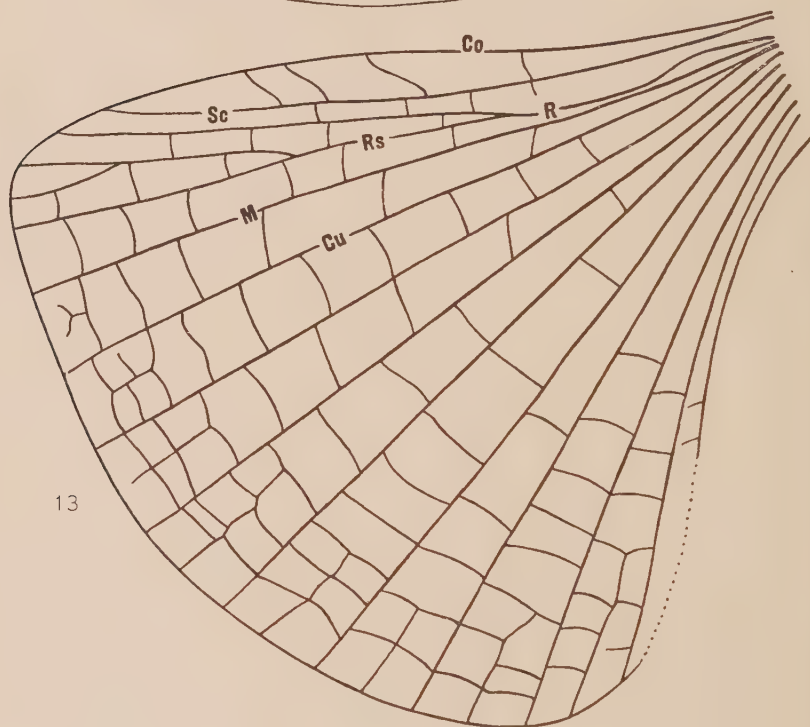
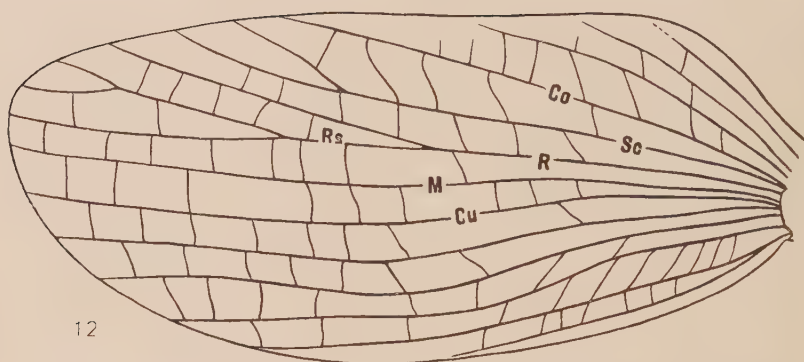
Elytra and wings developed, reaching the top of the abdomen, elytra as long as the hind femur, with the veins distinctly darker than the surface of the elytron. Elytron with 3 pre-costal veins, costa straight, simple; subcosta straight, near the apex bifurcated and terminating near the apex in the anterior margin; radius straight, radial sector arising about in the middle, this sector is bifurcated in its basal third, the anterior branch bifurcated near the apex; media simple, slightly bent in the middle, not connected with the neighbouring veins; cubitus simple, parallel to the media; there are 5 simple postcubital veins.

Wings subcycloid; subcosta straight, with about 5 transverse veins connected with the costa; radius straight, near the base curved, radial sector arising in the basal third, this sector bifurcated about in its middle, its anterior branch bifurcated near the apex; media simple, straight, at the base connected with the radius for a short distance; cubitus straight, simple; there are about 8 straight, simple post cubital veins.

Meso- and metasternum rounded. Legs normal. Anterior and median femur without spines. Anterior and median tibiæ from above smooth, from below with 4 long movable spines on both sides, besides with a short spine on both sides at the apex. Hind femur from below with a row of short spines on both sides. Hind tibia regularly spined as in *Niphetogryllacris*.

♀. — Supra analplate triangular, with a narrow median sulcus. Cercus (somewhat shrivelled in the specimen before me) cylindrical, slightly S-shaped, apex sharply pointed. Subgenital plate more or less quadrangular, lateral margins narrowing apically, hind margin broadly rounded. Ovipositor chitinous, slightly curved, apex subacute. Male unknown.

Genotype. — *Solomogryllacris simplex* nov. spec.



Figs. 12-13. — *Solomogryllacris simplex* n. sp., ♀.

12. — Elytron. 13. — Wing ( $\times 5$ ).

*Solomogryllacris simplex* nov. spec.

(Figs. 12-13.)

General coloration uniformly brown, to yellowish brown. Head brown, antennal scrobæ with the margins black, in the middle connected by a black transverse narrow stripe in the upper part. Occiput with two small round blackish spots on each side behind the eye.

Pronotum yellowish brown, impressed grooves darker coloured. Elytra light yellowish, venæ distinctly darker coloured. Wings hyalinous, without dark spots or stripes. Legs yellowish brown. Tibiæ from above at the base with a dark, small spot. Hind knee somewhat darker coloured. Abdomen dark brown. Ovipositor brown or yellowish brown.

	♀
Length of body ... ..	30 mm
» pronotum... ..	7 "
» elytron ... ..	19,5 "
» hind wing ... ..	19 "
» anterior femur... ..	10 "
» median femur ... ..	10 "
» posterior femur ... ..	19 "
» ovipositor ... ..	17 "

Geographical distribution. — Solomon Isl., Bougainville (Buin). The type is unique. Coll. mea.

*Niphetogryllacris aberrans* nov. spec.

(Figs. 14-15.)

This species is provisorily placed into the genus *Niphetogryllacris*, but differs from all the other species by the vena media of the hind wing, which at its base, over a small distance, is connected with the vena radialis, and not connected with the radial sector. More material and examination of the still unknown male is needed to verify this place in the system.

General coloration brown or dark brown. Head brown, with a yellowish white round spot in the middle between the antennæ, margins of antennal scrobæ blackish brown, cheeks with a brown spot in the upper part, just behind the eye. Pronotum brown, with some lighter coloured spots.



Elytra light yellowish, veins distinctly contrasting by the darker colour; there are 2 præcostal veins, costa simple, slightly curved, terminating a little behind the middle of the anterior margin; subcosta simple, slightly concavely bent in the middle; radius with the radial sector arising about in the middle; radial sector in its apical third bifurcated; media, about in the middle connected with the cubitus; there are 5 postcubital veins.

Wings hyalinous, without any trace of dark spots or bands: subcosta simple; radius strongly concave at its base, radial sector arising in the basal third; radial sector bifurcate about in its middle; media simple, at its base, for a very short distance, running near the radius; cubitus simple; there are about 9-10 postcubital veins.

Legs yellowish or yellowish brown; anterior and median femur from below with a dark stripe on the inner side; all tibiæ with a blackish spot from above and on the sides at the base. Hind femur yellowish, knee darker coloured. Abdomen brown, segments annulated with dark brown. Ovipositor slightly curved, apex subacute, brown. Male unknown.

	♀
Length of body ... ..	23 mm
» pronotum... ..	6 »
» elytron ... ..	17 »
» hind wing ... ..	17 »
» anterior femur ... ..	8 »
» median femur ... ..	8 »
» hind femur... ..	15,5 »
» ovipositor ... ..	16 »

Geographical distribution. — Solomon Isl., Bougainville (Buin). The type is unique. Coll. mea.

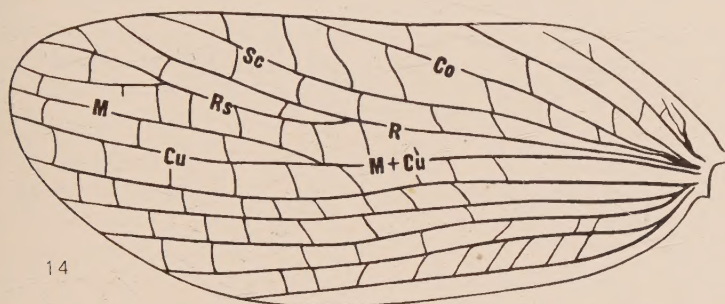
### *Anancistrogera dubia* nov. spec.

(Fig. 16-17.)

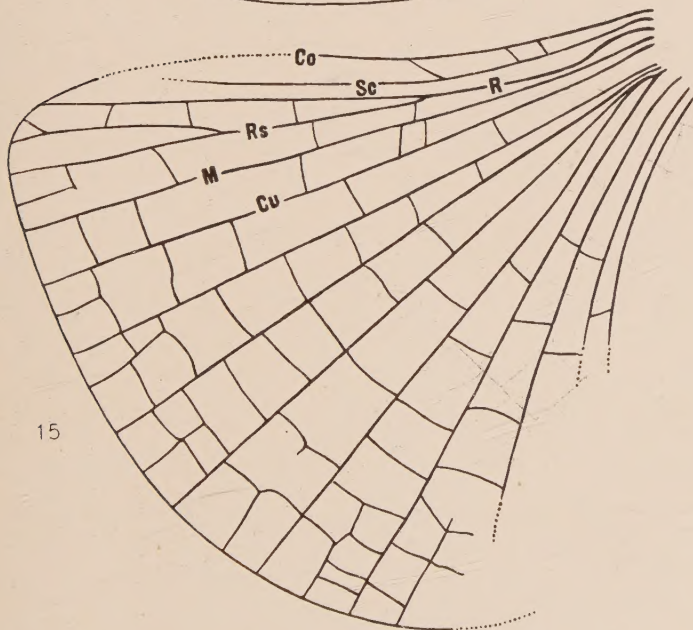
This species differs from the other species in the genus by the vena media of the wing, being simple and not connected with the radial sector, but only by a short connection at the base of the radius.

General coloration brown or yellowish brown. Head brown, below and between the upper part of the antennal scrobæ with a dark brown spot. Pronotum yellowish brown, with some symmetrical darker coloured figures on the disc. Elytra light

yellowish, veins distinctly darker coloured; there are 2 præcostal veins; costa simple, nearly straight, reaching the anterior margin a little behind the middle; subcosta bifurcated at its apex; radius at the apex bifurcated, radial sector arising about in the middle; radial sector bifurcated near its middle, each of the branches bifurcated near the apex; media and cubitus connected in the basal third, both of them simple; there are 6 postcubital veins. Wings subcycloid, subcosta bifurcated near



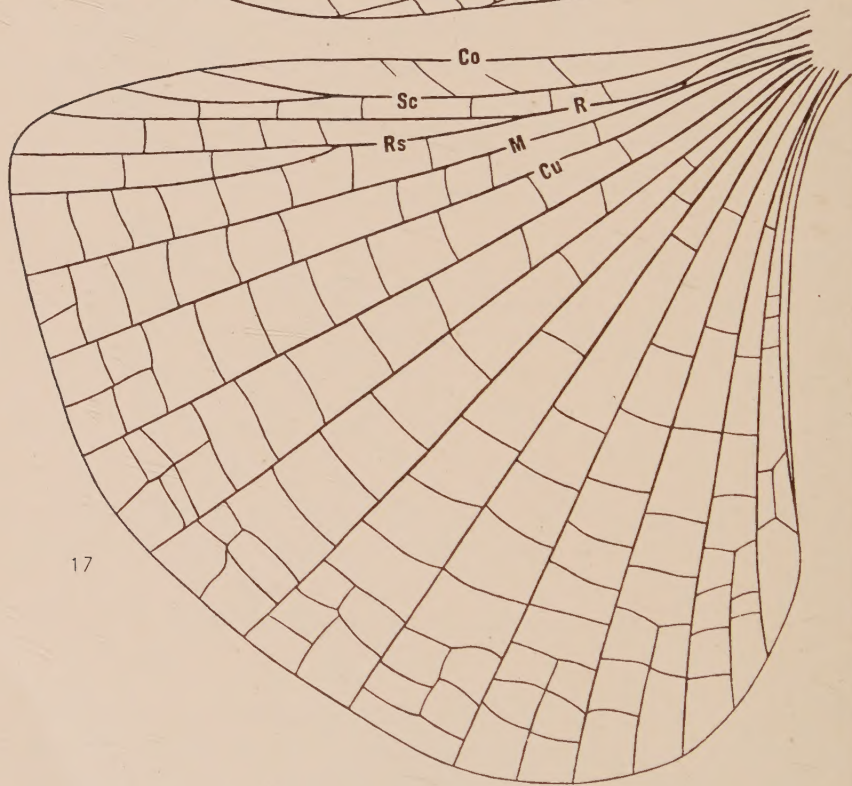
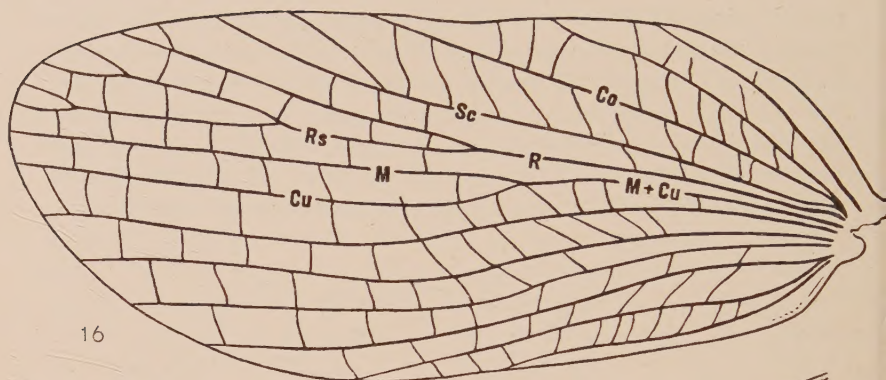
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15

Figs. 14-15. — *Niphetogryllacris aberrans* n. sp., ♀.

14. — Elytron. 15. — Wing ( $\times 5$ ).



Figs. 16-17. — *Anancistrogera dubia* n. sp., ♂.  
16. — Elytron. 17. — Wing ( $\times 5$ ).



the apex; radius at the base concavely bent, radial sector arising in the basal third and bifurcated a little before its middle; media simple, at the base connected with the radius by a very short vein; cubitus simple; there are 9 postcubital veins.

Legs yellowish brown or yellowish, tibiæ at their base with dark spots from above, hind knee somewhat darker coloured. Abdomen yellowish brown.

♂. — Supra analplate longer than broad, posterior margin incised; disc of the plate on both sides roundly inflated; there is a fine median keel, that is furcated at its apex. Cercus roundly bent, cylindrical, apex subacute. Subgenital plate longer than broad, posterior margin more or less bilobate, lobes rounded and thickened. Styli very short, not articulated inserted, in profile concavely bent. Female unknown.

	♂
Length of body ... ..	30 mm
» pronotum... ..	6 »
» elytron ... ..	21 »
» hind wing ... ..	21 »
» anterior femur... ..	10 »
» median femur ... ..	10 »
» posterior femur ... ..	18 »

Geographical distribution. — Solomon Isl., Bougainville (Buin). The type is unique. Type coll. mea.

